

WHAT IS CLAIMED IS:

1. A spindle motor comprising:
 - a turntable for receiving a recording disk;
 - 5 a holder plate disposed under the turntable; and
 - a self-balancing mechanism including an enclosed space which is defined by the turntable and the holder plate, shaped like an annular ring, and which has a plurality of balls movably disposed thereinside,
 - wherein the turntable has a plurality of openings pierced in its thickness direction
 - 10 and arrayed in its circumferential direction, and
 - wherein the holder plate defines a circular opening at its center and has a plurality of claw-shaped aligning members which are punched out so as to remain in an area corresponding to the circular opening, bent up at an inner circumference of the circular opening perpendicularly to the holder plate so as to be inserted respectively
 - 15 through the openings of the turntable, and which have their tip portions protruding from a top face of the turntable, thereby allowing the disk mounted on the turntable to be centrally aligned.
2. A spindle motor according to Claim 1, wherein the holder plate is made of a steel
- 20 plate, and each of the aligning members is bent toward a center of the turntable at its tip portion.
3. A spindle motor according to Claim 1, wherein the holder plate is made of a steel
- plate, and each of the aligning members is bent toward a center of the turntable at its
- 25 tip portion, and further is bent outward at a portion positioned below the bent tip portion so as to press the disk downward against the top face of the turntable.
4. A spindle motor according to any one of Claims 1 to 3, wherein each of the aligning
- members has, on a surface thereof in contact with a surface of an inner circumference of
- 30 the disk which defines a circular center hole, a convex curve formed widthwise which

has a curvature radius smaller than that of the circular center hole of the disk.

5. A spindle motor according to any one of Claims 1 to 4, wherein the inner circumference of the holder plate is engaged with an outer circumference of a partition
5 formed on a face of the turntable opposite to the top face for receiving the disk.